45

(C) CLASSIFICATION:

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/485,943

AU 1804

DATE: 04/7/96
TIME: 14:57:01

INPUT SET: S9945.raw

This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

Does Not Comply
SEQUENCE LISTINGORPORTS DISKETTE Needed

_		Progress Figures Provene Medded
2 3	(1) G	eneral Information:
4 5 6	(i)	APPLICANTS: Jeffrey M. Friedman, Yiying Zhang, Ricardo Proenca, Margherita Maffei, Jeffrey Halaas, Ketan Gajiwala, and Stephen K. Burley
7 8 9	(ii)	TITLE OF INVENTION: MODULATORS OF BODY WEIGHT, CORRESPONDING NUCLEIC ACIDS AND PROTEINS, AND DIAGNOSTIC AND THERAPEUTIC USES THEREOF
10 11 12	(iii)	NUMBER OF SEQUENCES: 99
13 14 15 16 17 18 19 20	(iv)	CORRESPONDENCE ADDRESS:  (A) ADDRESSEE: Klauber & Jackson  (B) STREET: 411 Hackensack Avenue  (C) CITY: Hackensack  (D) STATE: New Jersey  (E) COUNTRY: USA  (F) ZIP: 07601
21 22 23 24 25	(V)	COMPUTER READABLE FORM:  (A) MEDIUM TYPE: Floppy disk  (B) COMPUTER: IBM PC compatible  (C) OPERATING SYSTEM: PC-DOS/MS-DOS  (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
26 27 28 29 30	(vi)	CURRENT APPLICATION DATA:  (A) APPLICATION NUMBER: US 08/485,943  (B) FILING DATE: June 7, 1995  (C) CLASSIFICATION:
31 32 33 34 35	(vii	PRIOR APPLICATION DATA:  (A) APPLICATION NUMBER: 08/438,431  (B) FILING DATE: May 10, 1995  (C) CLASSIFICATION:
36 37 38 39 40	(vii	PRIOR APPLICATION DATA:  (A) APPLICATION NUMBER: 08/347,563  (B) FILING DATE: November 30, 1994  (C) CLASSIFICATION:
41 42 43 44	(vii	PRIOR APPLICATION DATA:  (A) APPLICATION NUMBER: 08/292,345  (B) FILING DATE: August 17, 1994

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/485,943

DATE: 04/17/96 TIME: 14:57:07

INPUT SET: S9945.raw

46	
47	(viii) ATTORNEY/AGENT INFORMATION:
48	(A) NAME: Jackson Esq., David A.
49	(B) REGISTRATION NUMBER: 26,742
50	(C) REFERENCE/DOCKET NUMBER: 600-1-087 CIP2I
51	
52	(ix) TELECOMMUNICATION INFORMATION:
53	(A) TELEPHONE: 201 487-5800
54	(B) TELEFAX: 201 343-1684
55	(C) TELEX: 133521
56	
57	

#### ERRORED SEQUENCES FOLLOW:

	429	(2)	INF	ORMA	TION	FOR	SEQ	ID 1	NO:6	:										
	430																)		,	
	431			(i)	SEQU	ENCE	CHA	RACT	ERTS'	rics	-		۔ سہ	<i>(</i>	16		$\leq h$	sing	d uo	,
>	432				(A	) LE	NGTH	:(16	7 am:	ino a	acid	5	$\Omega V$	IJY	ιv	20	200		~~ T	
	433				( B	) <b>T</b> Y	PE:	amin	o ac	ld				, 1		_	ر ، ۔۔	0100	i	
	434				( D	) TO:	POLO	GY:	line	ar			$\mathcal{I}$	•	$\sigma \cap$		1.15.2	2 11 (5	1 4	
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	440				( A	) OR	GANI	SM: 1	Huma	n										
	441																			
	442		(:	Ki) :	SEQU	ENCE	DES	CRIP'	rion	: SE	Q ID	NO:	6:							
	443																			
	444	Met	His	Trp	Gly	Thr	Leu	Cys	Gly	Phe	Leu	Trp	Leu	Trp	Pro	Tyr	Leu			
	445	1				5					10					15				
	446												_			_				
	447	Phe	Tyr	Val	Gln	Ala	Val	Pro	Ile		Lys	Val	Gln	Asp	_	Thr	Lys			
	448				20					25					30					
	449																			
	450	Thr	Leu		Lys	Thr	Ile	Val		Arg	Ile	Asn	Asp		Ser	His	Thr			
	451			35					40					45						
	452						_		_	_	_			_	_		_			
	453	Ser		Ser	Ser	Lys	Gln	_	Val	Thr	Gly	Leu	Asp	Phe	Ile	Pro	Gly			
	454		50					55					60							
	455		_		_		_						_	_	_					
	456		His	Pro	Ile	Leu		Leu	Ser	Lys	Met		Gln	Thr	Leu	Ala				
	457	65					70					75					80			
	458		_			_				_										
	459	Tyr	Gln	Gln	Ile		Thr	Ser	Met	Pro		Arg	Asn	Val	Ile		Ile			
	460					85					90					95				
	461					_								_		_	_			
	462	Ser	Asn	Asp	Leu	Glu	Asn	Leu	Arg	_	Leu	Leu	His	Val		Ala	Phe			
	463				100					105					110					

514

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/485,943

DATE: 04/17/96 TIME: 14:57:11

INPUT SET: S9945.raw	INPUT	SET:	S9945.raw	
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		1NPU1 SE1: 39943.ruw
	464	
	465	Ser Lys Ser Cys His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp
	466	115 120 125
	467	Com Low Clay Clay Col Low Clay Alo Com Clay Mary Com Mby Clay Col Col
	468	Ser Leu Gly Gly Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val 130 135 140
	469 470	130 135 140
	471	Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu
	472	145 150 155 160
	473	143
	474	Asp Leu Ser Pro Gly Cys
	475	165
	476	
	477	
	478	(2) INFORMATION FOR SEQ ID NO:7:
	479	(2) INFORMATION FOR SEQ ID NO:7:  (i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 175 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: double  (D) TOPOLOGY: linear  (ii) MOLECULE TYPE: DNA (genomic)  (A) DESCRIPTION: exon 2G7  LAIT.
	480	(i) SEQUENCE CHARACTERISTICS:
>	481	(A) LENGTH: 175 base pairs
	482	(B) TYPE: nucleic acid
	483	(C) STRANDEDNESS: double
	484 485	(D) TOPOLOGY: linear
	485 486	(ii) MOLECULE TYPE: DNA (genomic)
	487	(A) DESCRIPTION: exon 2G7
	488	(A) DESCRIPTION: EXON 267
	489	(iii) HYPOTHETICAL: NO
	490	
	491	(iv) ANTI-SENSE: NO
	492	` '
	493	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:
	494	
	495	GTGCAAGAAG AAGAAGATCC CAGGGCAGGA AAATGTGCTG GAGACCCCTG TGTCGGGTCC 60
	496	
	497	NGTGGNTTTG GTCCTATCTG TCTTATGTNC AAGCAGTGCC TATCCAGAAA GTCCAGGATG 120
	498	
>	499	ACACCAAAAG CCTCATCAAG ACCATTGTCA NCAGGATCAC TGANATTTCA CACACG
	500 501	
	301	
	502	(2) INFORMATION FOR SEQ ID NO:8:
	503	(a) and sended and all all and all all and all all all and all all all all all all all all all al
	504	(i) SEQUENCE CHARACTERISTICS:
	505	(A) LENGTH: 18 base pairs
	506	(B) TYPE: nucleic acid
	507	(C) STRANDEDNESS: single
	508	(D) TOPOLOGY: linear
	509	(i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 18 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear  (ii) MOLECULE TYPE: DNA (primer)
	510	(ii) MOLECULE TYPE: DNA (primer)
>	511	(A) LPCR 5 primer for exon 2G7
	512	(111) MUDOMURATA A NO
	513 514	(iii) HYPOTHETICAL: NO
	~ 1.7	

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/485,943

DATE: 04/17/96 TIME: 14:57:17

INPUT SET: S9945.raw (iv) ANTI-SENSE: NO (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8: CCAGGGCAGG AAAATGTG (2) INFORMATION FOR SEQ ID NO:9: - Description i (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 22 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: sipgle (D) TOPOLOGY: lipear (ii) MOLECULE TYPE: DNA (primer) (A) PCR 3 primer for exon 2G7 (iii) HYPOTHETICAL: NO (iv) ANTI-SENSE: YES (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9: CATCCTGGAC TTTCTGGATA GG (2) INFORMATION FOR SEQ ID NO:12: My 43 Showed up. (i) SEQUENCE CHARACTERISTICS: (A) LENGTH; 45 amino acids (B) TYPE: amino acid. (D) TOPOLOGY: linear (ii) MOLECULE TYPE: protein (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12: Met Gly Ser Ser His His His His His Ser Ser Gly Leu Val Pro Arg Gly Ser His Met Leu Glu Asp Pro Ala Ala Asn Lys Ala Arg Lys Glu Ala Glu Leu Ala Ala Ala Thr Ala Glu Gln 

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/485,943

DATE: 04/17/96 TIME: 14:57:22

		INPUT SET: S9945.raw	
	1232		
	1233	(i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 40 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	1234	(A) LENGTH: 40 base pairs	
	1235	(B) TYPE: nucleic acid	
	1236	(C) STRANDEDNESS: single	
	1237	(D) TOPOLOGY: linear	
	1238		
	1239	(ii) MOLECULE TYPE: DNA (primer)	
>	1240	(A) PCR 5 primer for amplifying human ob cDNA sequence	
	1241		
	1242	(iii) HYPOTHETICAL: NO	
	1243	(in) NUME CONCER NO	
	1244 1245	(iv) ANTI-SENSE: NO	
	1245		
	1245	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:	
	1247	(XI) SEQUENCE DESCRIPTION: SEQ ID NO.54.	
	1249	GTATCTCTCG AGAAAAGAGT GCCCATCCAA AAAGTCCAAG 40	)
	1250		
	1251		
	· -		
	1252	(2) INFORMATION FOR SEQ ID NO:35:	
	1253		
	1254	(i) SEQUENCE CHARACTERISTICS:	
	1255	(i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 31 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single	
	1256	(B) TYPE: nucleic acid	
	1257 1258	(C) STRANDEDNESS: single (D) TOPOLOGY: linear	
	1259	(b) TOPOLOGI: IIMeal	
	1260	(ii) MQLECULE TYPE: DNA (primer)	
>	1261	(A) PCR 3 primer for amplifying human ob cDNA sequence	
	1262	(11, 1)	
	1263	(iii) HYPOTHETICAL: NO	
	1264		
	1265	(iv) ANTI-SENSE: YES	
	1266		
	1267		
	1268	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:	
	1269	210	
	1270	GCGCGAATTC TCAGCACCCA GGGCTGAGGT C 31	
	1271 1272		
	12/2		
-	1273	(2) INFORMATION FOR SEQ ID NO:36:	
	1274		
	1275	(i) SEQUENCE CHARACTERISTICS:	
	1276	(i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 40 base pairs  (B) TYPE: nucleic acid	
	1277	(B) TYPE: nucleic acid	
	1278	(C) STRANDEDNESS: single	
	1279	(D) TOPOLOGY: linear	
	1280	(ii) MOI BOTTO BUTTO DAY (maimon)	
	1281 <b>1282</b>	(ii) MOLECULE) TYPE: DNA (primer)  (A) POR 5 primer for amplifying murine ob cDNA sequence	
>	1404	(w) Sor 2 bitmet for quibitiliting undiffue on chun seducine	

# RAW SEQUENCE LISTING PATENT APPLICATION US/08/485,943

DATE: 04/17/96 TIME: 14:57:27

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		INPUT SET: S9945.raw
	1283	
	1284	(iii) HYPOTHETICAL: NO
	1285	
	1286	(iv) ANTI-SENSE: NO
	1287	
	1288	
	1289	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:
	1290	
	1291	GTATCTCTCG AGAAAAGAGT GCCTATCCAG AAAGTCCAGG 40
	1292	
	1293	
	1294	(2) INFORMATION FOR SEQ ID NO:37:
	1295	( ) CROUDING CONDICTED CONTROL
	1296	(i) SEQUENCE CHARACTERISTICS:
	1297	(A) LENGTH: 31 base pairs
	1298	(A) LENGTH: 31 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single
	1299	(C) STRANDEDNESS: single
	1300	(D) TOPOLOGY: linear
	1301	
_	1302	(ii) MOLECULE TYPE: DNA (primer)
>	1303	(A) PCR 3 primer for amplifying murine ob cDNA sequence
	1304	
	1305	(iii) HYPOTHETICAL: NO
	1306	
	1307	(iv) ANTI-SENSE: YES
	1308	
	1309	
	1310	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:
	1311	
	1312	GCGCGAATTC TCAGCATTCA GGGCTAACAT C 31
	1313	
	1314	
	2666	(2) INFORMATION FOR SEQ ID NO:95:
	2667	
	2668	(i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 146 aming acids
>	2669	(A) LENGTH: 146 amino acids
-	2670	(B) TYPE: amino acid
	2671	(D) TOPOLOGY: linear
	2672	(-)
	2673	(ii) MOLECULE TYPE: protein
	2674	(A) DESCRIPTION: Recombinant murine met ob protein
	2675	(17) DEBOTTE LEGISLICHE MATTIC MOC ON Processi
	2676	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:
	2677	(NI) DESCRIPTION, DES IN MOINS.
	2678	Met Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys
	2679	
	2680	1 5 , 10 15
		Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser
	2681	
	2682	20 25 30
	2683	Ale Ive Cle And Vel Mbr Cly Iou Aon Dhe Tle Dre Cly Iou Vie Dre
	2684	Ala Lys Gln Arg Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/485,943

DATE: 04/17/96 TIME: 14:57:32

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																0221 0// 101/4//
2685			35					40					45			
2686																
2687	Ile	Leu	Ser	Leu	Ser	Lys	Met	Asp	Gln	Thr	Leu	Ala	Val	Tyr	Gln	Gln
2688		50					55					60				
2689																
2690	Val	Leu	Thr	Ser	Leu	Pro	Ser	Gln	Asn	Val	Leu	Gln	Ile	Ala	Asn	Asp
2691	65					70					75					80
2692																
2693	Leu	Glu	Asn	Leu	Arg	Asp	Leu	Leu	His		Leu	Ala	Phe	Ser	_	Ser
2694					85					90					95	
2695									_		_	_		_	_	_
2696	Cys	Ser	Leu		Gln	Thr	Ser	GTÀ		GIn	Lys	Pro	GLu		Leu	Asp
2697				100					105					110		
2698			_			_	_		_							~
2699	GTÀ	Val		GIU	Ala	Ser	Leu	-	ser	Thr	Glu	vaı		АТа	Leu	ser
2700			115					120					125			
2701	•	•	<b>41.</b>	<b>41</b>	<b>~</b>	<b>.</b>	<b>a</b> 1		<b>-1</b> -	<b>.</b>	<b>a</b> 1	<b>a</b> 1	<b>.</b>	<b>.</b>	**- 7	G
2702	arg		GIN	GTA	ser	Leu		Asp	тте	Leu	Gln		Leu	Asp	var	Ser
2703		130					135					140				
2704	<b>D</b>	<b>a</b> 1	<b>a</b>													
2705		Glu	cys													
2706	145															
2707 2708																
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♦ 8/485,943

#### **Notice of Availability**

Applicant Aid for Biotechnology Computer Readable Form (CRF)
Sequence Listings Submissions

The Patent and Trademark Office (PTO) has developed a computer program, called Checker, that will aid applicants in identifying and correcting errors prior to making submissions for compliance with the Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures (sequence rules: 37 CFR 1.821 through 1.825). (Final rules were published in the Federal Register (55 FR 18230) on May 1, 1990, and in the PTO Official Gazette (1114 Off.Gaz.PatOffice 29) on May 15, 1990.)

Checker is a DOS-based software program that is intended to assist users in determining whether errors may be present in the sequence listings, and is not intended to guarantee that the submission is error-free.

The most current version of the software will be available via computer downloading (details below). Copies on diskette are also available. Updated software versions will not be automatically mailed out; any updates will be announced in the PTO Official Gazette.

The software can be accessed/requested in the following locations:

- Dial-up access to the Patent and Trademark Office Bulletin Board System. Phone number: 703-305-8950 Cost: Free-of-charge
- Dial-up access through the Internet. FTP site: ftp.uspto.gov Login as "anonymous". Software is in directory /pub/checker Cost: Free-of-charge
- 3) For diskette copies, telephone requests to 703-306-2600. Cost: \$25.00

For Further Information Contact: Meredith Beckhardt at 703-308-4212.

Application No.: 08/985,993 NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

	1.	This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
	2.	This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
	3.	A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
X	4.	A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
	5.	The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
	6.	The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
	7.	Other:
Аp	pli	cant Must Provide:
X	Ar	n initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
X		n initial or <u>substitute</u> paper copy of the "Sequence Listing", as well as an amendment directing its stry into the specification.
X	ap	statement that the content of the paper and computer readable copies are the same and, where oplicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or .825(b) or 1.825(d).
Fo	r q	uestions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216

For CRF Submission Help, call (703) 308-4212

For Patentin software help, call (703) 308-6856

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